

figure 8 shows a detail of the distributor plate from figure 7, in an enlarged illustration.

5 The guide carriage according to the invention from figure 1 comprises an approximately U-shaped carrying body 1, in each case two carrying sections 2, 3 which are configured as ball grooves 4, 4a in the present case being formed on the two limbs 1a of said carrying body 1, which limbs 1a are formed on the longitudinal sides. Furthermore, in each case two return sections 10 5, 6 which are likewise configured as ball grooves 7, 8 in the present case are formed on the two limbs 1a. Rolling bodies 9 which are shown in figure 2 and are configured here as balls 10 can roll under load on the 15 carrying sections 2, 3. Said rolling bodies 9 can run back without load on the return sections 5, 6. The return sections 5, 6 and the carrying sections 2, 3 are connected endlessly to one another via deflection sections 11, 12, the deflection section 11 connecting the return section 5 endlessly to the carrying section 2 and the deflection section 12 connecting the return section 6 endlessly to the carrying section 3.

25 The deflection sections 11, 12 are formed on head pieces 13 which are flange connected to end sides of the carrying body 1. Each of the head pieces 13 comprises a distributor plate 14, an end piece 15 and a stripper plate 16. The distributor plate 14 and the end plate 15 are screwed to the carrying body 1 via 30 screws 17.

Furthermore, as viewed in cross section, the two limbs 1a of the carrying body 1 are provided with L-shaped side parts 18 which cover the return sections 5, 6.

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Each head piece 13 comprises an inner deflection means 19 and an outer deflection means 21 in a known manner. The inner deflection means 19 is formed on the

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distributor plate 14 and comprises two ball grooves 20, on which the balls 10 can roll. The outer deflection means 21 is formed on the end plate 15 and comprises ball grooves 22, on which the balls 10 can roll.

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Both the distributor plate 14 and the end plate 15 are manufactured from plastic using the injection molding process.

10 Threaded holes 23 are configured on the end plate 15, into which threaded holes 23 screws 23a are screwed. A lubricating nipple (not shown here) for relubrication is screwed into at least one of said threaded holes 23. Said threaded holes 23 communicate with a lubricant 15 channel 24 which is formed on the head piece 13. The lubricant channel 24 is formed both on the end plate 15 and on the distributor plate 14. Lubricant from that part of the lubricant channel 24 which is formed on the end plate 15 passes via a distributor hole 25 which is 20 formed on the distributor plate 14 to a branched distributor channel 26 which is formed in the manner of a groove on that side of the distributor plate 14 which faces the carrying body 1. The distributor channel 26 extends approximately in a U shape to the two limbs 27 25 of the distributor plate 14. The two ends of the distributor channel 26 each open into a transfer hole 28 which are likewise formed on the distributor plate 14. On its side which faces away from the distributor channel 26, the transfer hole 28 ends in the region of 30 the inner deflection means 19, to be precise it opens into a separating web 29 which separates the two ball grooves 20 of the inner deflection means 19 from one another.

35 As the finally mounted distributor plates 14 bear closely and tightly against the end side of the head piece 1, the distributor channel 26 is sealed off satisfactorily, with the result that lubricant can

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**List of designations**

- 1 Carrying body
- 1a Limb
- 2 Carrying section
- 3 Carrying section
- 4 Ball groove
- 4a Ball groove
- 5 Return section
- 6 Return section
- 7 Ball groove
- 8 Ball groove
- 9 Rolling body
- 10 Ball
- 11 Deflection section
- 12 Deflection section
- 13 Head piece
- 14 Distributor plate
- 15 End plate
- 16 Stripper plate
- 17 Screw
- 18 Side part
- 19 Inner deflection means
- 20 Ball groove
- 21 Outer deflection means
- 22 Ball groove
- 23 Threaded hole
- 23a screws
- 24 Lubricant channel
- 25 Distributor hole
- 26 Distributor channel
- 27 Limb
- 28 Transfer hole
- 29 Separating web
- 30 Valve
- 31 Cone
- 32 Cone tip
- 33 Cross slot

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- 34 Slot face
- 35 Cone segment
- 36 Funnel
- 37 Funnel tip
- 38 Funnel segment